

WHAT IS CLAIMED IS:

1. A pigment-dispersed aqueous recording liquid containing at least a pigment and a resin, which comprises from 60 to 200 parts by weight of the resin to
5 100 parts by weight of the pigment, wherein at least one of the resin is a water-dispersible urethane type resin, a weight fraction of a polyurethane urea part of which is at most 2.0 wt% to the urethane resin, and the pigment dispersed in the recording liquid has a dispersion
10 particle size D50 of from 40 to 100 nm.
2. The pigment-dispersed aqueous recording liquid according to Claim 1, wherein the pigment includes at least a carbon black having a DBP absorption amount of from 30 ml/100 g to 100 ml/100 g.
- 15 3. The pigment-dispersed aqueous recording liquid according to Claim 1, wherein the urethane type resin has a weight average molecular weight of higher than 5,000 but not higher than 100,000.
4. The pigment-dispersed aqueous recording liquid
20 according to Claim 1, wherein an acid value as a free acid of the urethane type resin is from 20 mgKOH/g to 100 mgKOH/g.
5. The pigment-dispersed aqueous recording liquid according to Claim 1, wherein the resin includes a resin
25 having an acid value of at least 50 mgKOH/g as a free acid in addition to the water-dispersible urethane type resin.

6. The pigment-dispersed aqueous recording liquid according to Claim 1, wherein a solid-printed part having 14.5 mg per square inch of a pigment-dispersed aqueous recording liquid printed by ink jet recording system on a
5 photographic image quality paper provides a printed thickness of at least 20 nm, an optical density of at least 2 and a 20° gloss value of at least 60.
7. The pigment-dispersed aqueous recording liquid according to Claim 1, wherein the pigment includes a
10 carbon black and a pigment other than the carbon black.
8. The pigment-dispersed aqueous recording liquid according to Claim 7, wherein the pigment other than the carbon black is a cyan pigment.
9. A printed material printed with a pigment-dispersed
15 aqueous recording liquid as defined in Claim 1.
10. The printed material according to Claim 9, wherein the printing is carried out by ejecting a pigment-dispersed aqueous recording liquid by an ink jet nozzle on a material to be recorded.
- 20 11. The printed material according to Claim 9, which has a printed thickness of at least 20 nm, an optical density of at least 2 and a 20° gloss value of at least 60.
12. The printed material according to Claim 9, which has an arithmetic average roughness of at most 0.04.
- 25 13. The printed material according to Claim 9, wherein the pigment-dispersed aqueous recording liquid contains at least a carbon black and the printed material is a

black printed material.

14. A pigment-dispersed aqueous recording liquid wherein a solid-printed part having 14.5 mg of ink per square inch printed by ink jet recording system on a
5 photographic image quality paper provides a printed thickness of at least 20 nm, an optical density of at least 2 and a 20° gloss value of at least 60.

15. The pigment-dispersed aqueous recording liquid according to Claim 14, which contains at least a carbon
10 black.

16. A printed material printed by ejecting a pigment-dispersed aqueous recording liquid through an ink jet nozzle on a material to be recorded, which provides a printed thickness of at least 20 nm, an optical density
15 of at least 2 and a 20° gloss value of at least 60.

17. The printed material according to Claim 16, wherein at least 14.5 mg per square inch of ink is deposited on a photographic image quality paper by solid-printing.